### REMARKS

The Office Action mailed June 9, 2006, has been received and reviewed. Claims 11 through 18 and 31 through 38 are currently pending in the application. Claims 11 through 18 and 31 through 38 stand rejected. Applicants have amended claims 11 and 31 and cancelled claims 15 and 35. Applicants respectfully request reconsideration of the application as amended herein.

### 35 U.S.C. § 112 Claim Rejections

Claim 11 stands rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse this rejection, as hereinafter set forth.

Claim 11 is amended herein to include recitations that the array emitter tips are "protruding from the conductive layer." The amendments are supported by the specification and the amendments to claim 11 overcome the 35 U.S.C. § 112, first paragraph, rejection. Applicants respectfully request the withdrawal of the 35 U.S.C. § 112, first paragraph, rejection of claim 11.

## 35 U.S.C. § 102(e) Anticipation Rejections

Anticipation Rejection Based on U.S. Patent No. 5,656,886 to Westphal et al.

Claims 11 through 13, 15, 17, 18, 31 through 33, 35, 37 through 41, 43, 45 and 46 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Westphal et al. (U.S. Patent No. 5,656,886). Applicants respectfully traverse this rejection, as hereinafter set forth.

Independent claim 11 is amended herein to include, in part, recitations of cancelled claim 15. In particular, claim 11 includes the recitations "a cap material layer comprising a material selected from the group consisting of silicon nitride, silicon carbide, and diamond-like carbon." Westphal et al. fails to describe such recitations and therefore is unable to anticipate claim 11 under 35 U.S.C. § 102(e) because "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." See, M.P.E.P. §2131 citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d

628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Westphal et al. does not describe a cap material layer "comprising a material selected from the group consisting of silicon nitride, silicon carbide, and diamond-like carbon" as recited in claim 11. Instead, "cap layer 20" of Westphal et al. comprises "deposited SiO<sub>2</sub>." The failure of Westphal et al. to expressly or inherently describe the cap material layer recited in claim 11 precludes an anticipation rejection of claim 11. *Id*.

Similarly, Westphal et al. fails to anticipate independent claim 31. Claim 31 is amended herein to include, in part, recitations of claim 35, which claim is cancelled. Amended claim 31 recites, in part, "a cap material layer comprising a material selected from the group consisting of silicon nitride, silicon carbide, and diamond-like carbon." Westphal et al. does not describe a cap material layer comprising any of the materials recited in claim 31. The lack of such description precludes an anticipation rejection of claim 31 under 35 U.S.C. § 102(e). See, Verdegaal Brothers v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claims 12, 13, 17, and 18 depend from independent claim 11. As dependent claims of an independent claim which is not anticipated, claims 12, 13, 17, and 18 are also not anticipated because they inherit all of the recitations of the independent claim from which they depend.

Claims 32, 33, 37, and 38 depend from independent claim 31. As dependent claims of an independent claim which is not anticipated, claims 32, 33, 37, and 38 are also not anticipated because they inherit all of the recitations of the independent claim from which they depend.

Claims 15 and 35 are cancelled herein. Claims 39 through 41, 43, 45, and 46 were previously cancelled.

For at least the foregoing reasons, Applicants respectfully request that the 35 U.S.C. § 102(e) anticipation rejection of claims 11 through 13, 17, 18, 31 through 33, 37, and 38 are withdrawn.

# Anticipation Rejection Based on U.S. Patent No. 5,557,159 to Taylor et al.

Claims 11, 13, 15, 17, 18, 31, 33, 35, 37 and 38 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Taylor et al. (U.S. Patent No. 5,557,159). Applicants respectfully traverse this rejection, as hereinafter set forth.

Claim 11 is an independent claim and is amended herein to include recitations of cancelled claim 15. Amended claim 11 recites, in part, a cap layer comprising "a cap material layer comprising a material selected from the group consisting of silicon nitride, silicon carbide, and diamond-like carbon." The Action alleges that the insulating layer 64 of Taylor et al. is equivalent to the cap material layer recited in claim 11. However, the insulating layer 64 of Taylor et al. "may comprise silicon dioxide (SiO2)." See, Taylor et al. at col. 7., lines 5-7. Nowhere in Taylor et al. is there a description of the insulating layer 64 comprising "a material selected from the group consisting of silicon nitride, silicon carbide, and diamond-like carbon" as recited in claim 11. The lack of such description precludes an anticipation rejection of claim 11 because an anticipation rejection under 35 U.S.C. § 102(e) is only proper if the cited reference describes each and every recitation of the claim being rejected. See, Verdegaal Brothers v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claims 13, 17, and 18 depend from claim 11. As dependent claims of an independent claim which is not anticipated, claims 13, 17, and 18 are also not anticipated because they inherit all of the recitations of the independent claim from which they depend.

Independent claim 31 is amended herein to include recitations of cancelled claim 35.

Amended claim 31 recites, in part, a cap layer comprising "a cap material layer comprising a material selected from the group consisting of silicon nitride, silicon carbide, and diamond-like carbon." As with claim 11, the Action alleges that the insulating layer 64 of Taylor et al. is equivalent to the cap material layer recited in claim 31. However, Taylor et al. fails to describe such recitations. The failure of Taylor et al. to describe all of the recitations of claim 31 precludes an anticipation rejection of claim 31. *Id*.

Claims 33, 37, and 38 depend from independent claim 31. As dependent claims of an independent claim which is not anticipated, claims 33, 37, and 38 are also not anticipated because they inherit all of the recitations of the independent claim from which they depend.

Claims 15 and 35 are cancelled herein.

For at least the foregoing reasons, Applicants respectfully request the withdrawal of the 35 U.S.C. § 102(e) rejection of claims 11, 13, 17, 18, 31, 33, 37, and 38.

# 35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent No. 5,656,886 to Westphal et al.

Claims 14, 16, 34 and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Westphal et al. (U.S. Patent No. 5,656,886) as applied to claim 11. Applicants respectfully traverse this rejection, as hereinafter set forth.

Claims 14 and 16 depend from independent claim 11 and claims 34 and 36 depend from independent claim 31. Neither claim 11 nor claim 31 are obvious or anticipated. As dependent claims of nonobvious independent claims, claims 14, 16, 34, and 36 are also nonobvious. *See*, M.P.E.P. § 2143.03 (citing, *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)(if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious)). Therefore, Applicants respectfully request the withdrawal of the 35 U.S.C. § 103(a) obviousness rejection of claims 14, 16, 34, and 36.

# **ENTRY OF AMENDMENTS**

The amendments to claims 11 and 31 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application. Further, the amendments do not raise new issues or require a further search.

#### **CONCLUSION**

Claims 11 through 14, 16 through 18, 31 through 34, and 36 through 38 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicants' undersigned attorney.

Respectfully submitted,

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